

## Book review

**Waste to Wealth: The Circular Economy Advantage.** By Peter Lacy and Jakob Rutqvist (Palgrave Macmillan) ISBN 978-1-137-53068-4

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*Waste to Wealth* by Lacy and Rutqvist is about a new era of growth and innovation where waste is the 'biggest economic opportunity of our time': the era of the circular economy. Although the concepts underpinning the circular economy have been around since the 1970s only recently has it caught the interest from decision-makers and the business sector, and is becoming a viable alternative to the current linear economic model. This is a practical book where the authors try to equip industry practitioners and change makers with helpful strategies in the face of the daunting prospect of moving toward a circular economy.

The objective of the book is to 'inform and energize about a clear way to gain advantage in a circular economy'. At the core of the book, the authors examine five new circular economy business models, which have been derived from the analysis of more than 120 companies. The book provides knowledge, strategies and techniques for tackling business challenges in a resource constraint world. Lessons learnt from circular economy initiatives in firms across a number of industry sectors including Interface, Caterpillar, Dell, Airbnb, Uber, Lyft, Michelin, P&G, Nike, Natureworks, AkzoNobel and IKEA among others, are presented as case studies throughout the book.

The book is divided into 4 sections with 13 chapters which spread over 264 pages. It opens with forewords from circular economy pioneers Sir Ian Cheshire, former Group CEO of Kingfisher, and William McDonough, co-author of the seminal books 'Cradle-to-Cradle: remaking the way we make things' and 'The Upcycle: beyond sustainability – designing for abundance'.

Section I builds the case for the circular economy. In Chapter 1, the authors argue why the linear growth model is becoming increasingly impractical. Chapter 2 reviews the roots of the circular economy, and why over the past 50 years, it has evolved as a superior model to generate value by decoupling industry from materials and fossil energy. Chapter 3 focuses on 'gaining the circular advantage'. Here, the authors estimate a value opportunity of \$4.5 trillion by 2030 from business solutions that target and eliminate four types of linear economy waste – wasted resources, wasted lifecycles, wasted capacity, and wasted embedded value. The authors suggest that seven key industries could capitalise on eliminating the four types of waste: agriculture and food, apparel, automotive and transportation, construction industry, consumer electronics and IT, energy, and industrial equipment.

Section II presents in detail five new business models for circular growth free of the constraints of linear thinking: circular supply-chain (Chapter 4); recovery and recycling (Chapter 5); product life-extension (Chapter 6); sharing platform (Chapter 7); and product as

a service (Chapter 8). All five business models are illustrated with multiple case studies from industry practice. The authors also offer advice on getting started, overcoming the challenges to scaling, and ultimately, how to 'bring each of the business models to life'.

In Section III, the authors explore how companies can create circular advantage. They suggest a process of evaluating the options of new business models, creating the right external enablers, and expanding the ecosystem (Chapter 9). The role of digital, engineering and hybrid technologies in creating circular economy advantage is then investigated (Chapter 10). This is followed by five circular capabilities for driving value. Namely, strategy, innovation and product development, sourcing and manufacturing, sales and product use, and return chains (Chapter 11). Lastly in this section, the power of policy for driving adoption of the circular economy is discussed (Chapter 12).

Finally, in Section IV (Chapter 13), the authors prompt for action - 'the time to start is now' - and suggest important kick-start points for capturing the advantage of the circular economy.

The book is novel in its attempt to go beyond discussion of circular economy concepts and offer practical strategies, so that circular economy opportunities can become widely accessible to a larger number of companies and society as a whole. The authors send a clear message that 'business as usual' is no longer sustainable, and offer pragmatic advice on how to turn this challenge into a viable economic opportunity. In my opinion, the book is an important foundation and an early practical guide in the field of circular economy. An important aspect of the book is the large number of examples from world leaders in this field, which illustrate various approaches and success stories which readers can learn from.

As an education source, the value of the book is in the introduction of five business models which can act as a lens for understanding this phenomenon better, and facilitate the shift toward circular economy in practice. Students can learn from the series of frameworks developed by the authors, and from the multiple real life examples. I would recommend it to academics, entrepreneurs, intrapreneurs, and consultants exploring the circular economy who would find the book a rich source of ideas and strategies for developing circular businesses.